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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,537

04/06/2005

Jin-Ha Park

SHN-0041

5460

23413 7590 03/30/2009  
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EXAMINER

SUERETH, SARAH ELIZABETH

ART UNIT

PAPER NUMBER

3749

NOTIFICATION DATE

DELIVERY MODE

03/30/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/530,537	<b>Applicant(s)</b> PARK, JIN-HA	
	<b>Examiner</b> Sarah Suereth	<b>Art Unit</b> 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Receipt of applicant's amendment filed on 09/05/08 is acknowledged. Applicant's arguments with respect to the rejection(s) of claim(s) 7-14 under Rodriguez-Rodriguez have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration and search, a new ground(s) of rejection is made below. Because this new grounds of rejection was not necessitated by applicant's amendment, this office action is made NON-FINAL.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7,9-11,13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higley (5,628,242) in view of Butts (4,454,501).

4. Higley discloses a gas control assembly for a gas range (col. 7, lines 47-49) including a DC power source (402), a thermal sensor (506) for sensing the heat of an oven burner (col. 5, lines 58-60), a magnetic opening/closing unit (414), and a control circuit unit (502) causing the valve to close when the thermal sensor is triggered or when the timer expires (col. 5, lines 65-67 and col. 6, lines 1-2).

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5. Although Higley describes his invention as useful with an outdoor grill, Higley explicitly teaches using the device with either an indoor oven or gas range (col. 5, lines 18-25).

6. Regarding claims 7 and 11, the user first programs in a reference operating time to begin the timer. When the timer has almost expired, an alarm sounds, and the user is allowed to adjust the reference time up or down, resulting in the new operating time. If the user does not increase the time remaining on the timer at this point, the timer continues to run until it expires. When the time expires, the gas valve is shut off by the microprocessor [See col. 5, lines 52-56].

7. Higley discloses a control panel (508) including input entry means and a display unit showing the time countdown (col. 5, lines 39-44). Higley teaches that control panels are well known in the art, but does not explicitly show that the input means is a button, or the display unit is digital.

8. Butts shows a conventional gas range control panel (13) including a digital timer/clock (43) and the control panel including buttons (Figure 2).

9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Higley control panel to include the prior art digital display in order to use a sophisticated information entry system (Butts, col. 1, lines 55-59).

10. Regarding claim 9, the Higley apparatus has an audible alarm (512). Higley also teaches that the prior art provided gas sensors to prevent fires when a pilot light goes out (col. 1, lines 37-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Higley apparatus to use the prior art gas sensor with the alarm as an obvious extension of the prior art.

11. Regarding claim 10, it is not clear from the Higley Figures if the circuitry includes a signal amplifier, a clock oscillator, or a digital formation signal generator. The Butts control circuitry obviously includes a digit formation signal generator, as the clock has a digital display (Figure 2), but that portion of the circuitry is not explicitly shown. The Higley controller performs all of the recited functions, but is not defined as a "microcomputer", rather it is described as a microprocessor. However, the claim term "microcomputer" does not appear to require a specific structure.

The examiner takes Official Notice that it was old and notorious in the art to use signal amplifiers, oscillators, signal generators in control circuitry.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Higley in view of Butts apparatus by using old and well known circuitry components in their intended manner.

**12.** Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higley (5,628,242) in view of Butts (4,454,501), further in view of Huang et al (US Patent 6,164,958).

**13.** As discussed above, Higley does not disclose indicator lights on the gas stove.

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**14.** Huang discloses a gas stove including indicator lights (38) for indicating burner ignition (col. 3, lines 32-35), and a gas sensor (50) that triggers an alarm (col. 3, lines 28-47).

**15.** It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Higley apparatus to include the indicator lights of Huang in order to notify the user if unsafe conditions exist (col. 3, lines 29-33).

### ***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Suereth whose telephone number is (571)272-9061. The examiner can normally be reached on Mondays & Tuesdays 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah Suereth/  
Examiner, Art Unit 3749

/Steven B. McAllister/  
Supervisory Patent Examiner, Art Unit 3749